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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,294	07/24/2003	Kitchener Clark Wilson	P03-KITCH-0044	1869

34744 7590 12/20/2005

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EXAMINER	
GONZALEZ, JULIO C	

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,294	WILSON, KITCHENER CLARK	
	Examiner	Art Unit	
	Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-23,26,27,30-34,42-52,55,57,60-65 and 67-89* is/are pending in the application.

4a) Of the above claim(s) *65 and 67-80* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-23,26,27,32-34,42-52,55-57,62-64,81,84-87 and 89* is/are rejected.

7)☒ Claim(s) *30,31,60,61,82,83 and 88* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The indicated allowability of claims 47 is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Objections

1. Claims 57-64 and 66 are objected to because of the following informalities: Claim 57 is initially misnumbered since the claims jump from number 55 to number 57. Claim numbered 57 should be "56"; claim numbered 58 should be "57" and so on. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 15-20, 27, 34, 42-44, 57, 64, 81, 86, 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett US 4,504,761) in view of Breed et al (US 6,662,642).

Triplett discloses a device for obtaining energy from tire 38 and a piezoelectric device 112 being mounted on the inner walls of the tire 38 and the piezoelectric device responds to the deflections of the tire (see abstract). However, Triplett does not disclose having a base plate.

On the other hand, Breed et al discloses for the purpose of monitoring economically and efficiently the conditions of a tire, a base plate 137 being attached to a device 40, 135 within a tire (see figure 9B). Moreover, the device 135 can be adapted to be embedded in the tire (see figure 3A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a device for obtaining energy as disclosed by Triplett and to use a base plate for the purpose of monitoring economically and efficiently the conditions of a tire as disclosed by Breed et al.

4. Claims 21-23, 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 17, 20, 44 above, and further in view of Balzer et al (US 6,462,650).

The combined device discloses all of the elements above. However, the combined device does not disclose an adhesive patch.

On the other hand, Balzer et al discloses for the purpose of improving the durability of the system, an adhesive patch 30 being associated with a base plate E (see figure 1; column 6, lines 48-56). Moreover, it is disclosed that fasteners 20, 22 are used (column 6, lines 56-67) and a substrate being attached to a tire by using a base plate (column 3, lines 45-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by using an adhesive patch for the purpose of improving the durability of the system as taught by Balzer et al.

5. Claims 45, 46, 47, 84, 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett, Breed et al as applied to claim 44 above, and further in view of Koch et al (US 5,573,611).

The combined device discloses all of the elements above. However, the combined device does not disclose that a patch covers a base and contacts an inner wall of a tire.

On the other hand, Koch et al discloses for the purpose of monitoring effectively the conditions of a tire, electronic devices 17 being located on a base and the base contacting the inner wall of tire 5 and a patch 80 having a surface

overlaying the surface of the base (see figure 7) and device being sandwiched between the patch 80 and tire surface 5. Moreover, the patch 80 has an aperture 84 (see figures 7, 9, 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to have a device between a patch and a tire surface for the purpose of monitoring effectively the conditions of a tire as disclosed by Koch et al.

6. Claims 26, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 25, 54 above, and further in view of Thomas (US 4,405,872).

The combined device discloses all of the elements above. However, the combined device does not disclose that the energy converter has a magnet and a coil.

On the other hand, Thomas discloses for the purpose of providing a reliable and inexpensive way of generating electricity in a tire, a magnet 26 and coil 38 (see figures 4, 5) and moving the magnet and the coil relative to each other (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by using a magnet and a coil for the purpose of providing a reliable and inexpensive way of generating electricity in a tire as disclosed by Thomas.

7. Claims 32 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 15, 42 above, and further in view of Thomas (US 3,760,351).

The combined device discloses all of the elements above. However, the combined device does not disclose having a push rod being attached to the inner wall of the tire.

On the other hand, Thomas discloses for the purpose of monitoring the tire conditions efficiently, a rod 20 attached to the inner wall of the tire (see figures 1, 2 & abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by using a push rod for the purpose of monitoring the tire conditions efficiently as disclosed by Thomas.

8. Claims 33 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 15, 42 above, and further in view of Lippitt (US 2,072,459).

The combined device discloses all of the elements above. However, the combined device does not disclose having a cable attached to the inner wall.

On the other hand, Lippitt discloses for the purpose of reducing failures in tires, a cable 16, 31 being attached to the inner walls (see figures 1, 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by having a cable being attached to the inner walls for the purpose of reducing failures in tires as disclosed by Lippitt.

9. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claim 86 above, and further in view of Margolis et al (US 5,570,286).

The combined device discloses all of the elements above. However, the combined device does not disclose taking into consideration the pulse width of a signal.

On the other hand, Margolis et al discloses for the purpose of achieving optimum performance of a regenerative system that pulse width is taken into account when managing energy sources (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to take into account the pulse width discloses for the purpose of achieving optimum performance of a regenerative system as disclosed by Margolis et al.

Allowable Subject Matter

10. Claims 30, 31, 60, 61, 82, 83, 88 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments filed 09/30/05 have been fully considered but they are not persuasive.

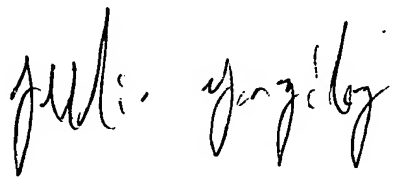
Triplett and Breed et al inherently teach using electronic devices in combination with the production of energy since piezoelectric devices use converters (Triplett, column 1, lines 33-38) and Breed et al further discloses using capacitors for storing energy (Breed et al, column 28, lines 61-65)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julio C. Gonzalez
Examiner
Art Unit 2834

Jcg

December 8, 2005